MICHAEL BRAUN
Cox School of Business
Southern Methodist University
braunm@smu.edu

Academic Appointments

- Southern Methodist University, Cox School of Business
    - Associate Professor of Marketing, 2013-present
    - Marilyn and Leo F. Corrigan Research Professor, 2018-present
    - Fisher Faculty Fellow, 2016-2018

- Massachusetts Institute of Technology, MIT Sloan School of Management
    - Associate Professor of Management Science (Marketing Group), 2011-2013
    - Assistant Professor of Management Science (Marketing Group), 2006-2011
    - Homer A. Burnell (1928) Career Development Professor, 2008-2011
    - Affiliate Faculty, MIT Operations Research Center, 2006-2013

- Short-term appointments
    - University of Oxford, Saïd Business School, Visiting Professor, Trinity Term 2016
    - University of Queensland, Visiting Research Fellow, Spring 2016
    - Tilburg University, Visiting Scholar, Spring 2009
    - University of Michigan, Ross School of Business, Visiting Scholar, Fall 2008

Education

- University of Pennsylvania, Wharton School, Ph.D., 2006

- Duke University, Fuqua School of Business, M.B.A., 1996

- Princeton University, A.B. with Honors in Economics, 1992

Publications

- M. Braun (2024). "Revisiting Scalable Targeted Marketing with Distributed Markov Chain Monte Carlo." *Journal of Marketing Research*. Accepted for publication.

- M. Braun, B. De Langhe, S. Puntoni, and E. Schwartz (2024). "Leveraging Digital Advertising Platforms for Consumer Research." *Journal of Consumer Research*. DOI:10.1093/jcr/ucad058.

- J. I. Turner, R. Wright, and M. Braun (2024). "Neglected Discovery." *Duke Law Journal*, 73(6): 1173–1228.

- F. Feinberg, E. Bruch, M. Braun, B. H. Falk, N. Fefferman, E. M. Feit, J. Helveston, D. Larremore, B. B. McShane, A. Patania, and M. L. Small (2020). "Choices in Networks: A Research Framework." *Marketing Letters*, 31(4): 349–359. DOI:10.1007/s11002-020-09541-9.

- M. Braun and P. Damien (2019). "A Non-Markovian Method for Full Parametric Bayesian Inference." In: *Marketing and Big Data Technologies: New Trends and Applications.* Ed. by S. Tsafarakis and N. Matsatsinis. Springer-Verlag.

- M. Braun, J. Rosenthal, and K. Therrian (2018). "Police Discretion and Racial Disparity in Organized Retail Theft Arrests: Evidence from Texas." *Journal of Empirical Legal Studies*, 15(4): 916–950. DOI:`10.1111/jels.12201`.

- M. Braun (2017). "sparseHessianFD: Estimating Sparse Hessian Matrices in R." *Journal of Statistical Software*, 82(10): 1–22. DOI:`10.18637/jss.v082.i10`.

- M. Braun and P. Damien (2016). "Scalable Rejection Sampling for Bayesian Hierarchical Models." *Marketing Science*, 35(3): 427–444. DOI:`10/b4bd`.

- M. Braun, D. A. Schweidel, and E. M. Stein (2015). "Transaction Attributes and Customer Valuation." *Journal of Marketing Research*, 52(6): 848–864. DOI:`10/b4bb`.

- M. Braun (2014). "trustOptim: An R Package for Trust Region Optimization with Sparse Hessians." *Journal of Statistical Software*, 60(4): 1–16. DOI:`10/b4bc`.

- M. Braun and W. W. Moe (2013). "Online Display Advertising: Modeling the Effects of Multiple Creatives and Individual Impression Histories." *Marketing Science*, 32(5): 753–767. DOI:`10/b4bf`.

- M. Braun and D. A. Schweidel (2011). "Modeling Customer Lifetimes with Multiple Causes of Churn." *Marketing Science*, 30(5): 881–902. DOI:`10/ddv975`.

- M. Braun and A. Bonfrer (2011). "Scalable Inference of Customer Similarities from Interactions Data Using Dirichlet Processes." *Marketing Science*, 30(3): 513–531. DOI:`10/d4gjn9`.

- M. Braun and J. McAuliffe (2010). "Variational Inference for Large-scale Models of Discrete Choice." *Journal of the American Statistical Association*, 105(489): 324–335. DOI:`10/crf3mc`.

- J. R. Hauser, G. L. Urban, G. Liberali, and M. Braun (2009). "Response to Comments on 'Website Morphing'." *Marketing Science*, 28(2): 227–228. DOI:`10.1287/mksc.1080.0485`.

- G. L. Urban, J. R. Hauser, G. Liberali, M. Braun, and F. Sultan (2009). "Morph the Web to Build Empathy, Trust and Sales." *MIT Sloan Management Review*, 50(4): 53–61.

- J. R. Hauser, G. L. Urban, G. Liberali, and M. Braun (2009). "Website Morphing." *Marketing Science*, 28(2): 202–223. DOI:`10/bqpzqr`.
    - Finalist, ISMS Long-term Impact Award, 2017 and 2018
    - Finalist, John D. C. Little Award (best marketing paper in an INFORMS journal)
    - Lead article with commentaries
    - Top 50 Management article in 2009, Emerald Management Reviews

- M. Braun, P. S. Fader, E. T. Bradlow, and H. Kunreuther (2006). "Modeling the Pseudodeductible in Homeowners' Insurance." *Management Science*, 52(8): 1258–1272. DOI:`10/crg738`.
  - Winner, Best Student Paper, INFORMS Decision Analysis Society, 2006
- M. Braun and A. Muermann (2004). "The Impact of Regret on the Demand for Insurance." *Journal of Risk and Insurance*, 71(4): 737–767. DOI:`10/cxbfkv`.
  - Winner, 2014 Robert I. Mehr Award, American Risk and Insurance Association.

Work Under Review or Being Revised

- "Where A-B Testing Goes Wrong: How Divergent Delivery Affects What Online Experiments Cannot (and Can) Tell You About How Customers Respond to Advertising" (with E. Schwartz). Under third round review at *Journal of Marketing*. Working paper at `https://ssrn.com/abstract=3896024`. Web application at `braunm.github.io/ABTestDeception`.
- "Defense Use of Digital Discovery in Criminal Cases: An Empirical Analysis." (with J. I. Turner and R. Wright). Under second round review at *Justice Quarterly*.
- "Probabilistic Machine Learning: New Frontiers for Modeling Consumers and their Choices" (with R. Dew, N. Padilla, A. Ansari, K. Boughanmi, F. Feinberg, J. Lia, L. Luo, S. Oblander, T. Otter, L. Tian, Y. Wang, and M. Yin). Under review at *International Journal of Research in Marketing*.

Software

All listed software is open-source and publicly available.

- *trustOptim* - Trust Region Optimization for Objective Functions with Sparse Hessians. *R package.* `braunm.github.io/trustOptim`
- *sparseHessianFD* - Efficient Estimation of Sparse Hessians. *R package.* `braunm.github.io/sparseHessianFD`
- *sparseMVN* - Efficient Multivariate Normal Density and Sampling Functions for Sparse Covariance/Precision Matrices. *R package.* `braunm.github.io/sparseMVN`
- Companion web application to "The A/B Test Deception." `braunm.github.io/ABTestDeception`
- *bayesGDS* - Scalable Rejection Sampling from Posterior Densities of Bayesian Hierarchical Models. *R package.*

Press

- "Commentary: Legislature Can Stop an Injustice by Redefining What Constitutes 'Organized Retail Theft'". *Austin American-Statesman*, May 13, 2019. `https://tinyurl.com/BraunORToped`

Conference and Workshop Presentations

- Invited panel on A/B Testing in Marketing Research. Association for Consumer Research (ACR) Conference, Seattle, Wash., October 2023.

- 12th Triennial Invitational Choice Symposium, Workshop on Probabilistic Machine Learning, Bayes, and the Future of Marketing Modeling. Fontainbleau, France. August 2023.

- Texas House of Representatives, Committee on Criminal Jurisprudence, testimony on HB 4779 (Organized Retail Theft), April 2023.

- 16th Conference on Empirical Legal Studies, University of Virginia Law School, Charlottesville, Va., November 2022.

- Duke Empirical Criminal Law Roundtable, Online, December 2021.

- UTD-FORMS Conference, Online, February 2021.

- Invited discussant, UTD-FORMS Conference, Dallas, February 2020.

- Invited panel on Teaching Marketing Analytics: Sharing Experiences, Lessons, Recommendations. 2019 AMA Summer Academic Conference, Chicago, August 2019.

- INFORMS Marketing Science Conference, Rome, June 2019.

- 11th Triennial Invitational Choice Symposium, Workshop on Decision Processes in Networks, Cambridge, Md., May 2019.

- Texas House of Representatives, Committee on Criminal Jurisprudence, testimony on HB 4602 (Organized Retail Theft), April 2019.

- Invited presenter, Future of Policing webinar, Charles Koch Foundation Program on Criminal Justice Reform, April 2019.

- Organizer and host, 15th Marketing Dynamics Conference, Dallas, Texas, July 2018.

- AMA Marketing and Public Policy Conference, Columbus, Ohio, June 2018.

- Invited session (organizer and presenter) on Marketing Responses to Public Policy Crises, AMA Winter Academic Conference, New Orleans, La., February 2018.

- 12th Conference on Empirical Legal Studies, Cornell Law School, Ithaca, N.Y., October 2017.

- Invited discussant, 14th Marketing Dynamics Conference, Hong Kong, August 2017.

- INFORMS Marketing Science Conference, Los Angeles, June 2017.

- Invited discussant, Quantitative Marketing and Economics, Evanston, Ill., October 2016.

- UT-Arlington College of Business 50th Year Celebration Faculty Research Conference, Arlington, Texas, March 2016.

- Invited session on Revenue Management with Marketing Applications. INFORMS Annual Meeting, Philadelphia, November 2015.

- Invited session on Big Data of Customer Analytics in the Era of Social Media. Joint Statistical Meetings, Seattle, August 2015.

- Big Data Marketing Analytics Conference, Chicago, October 2014.

- Joint Statistical Meetings, Boston, Mass., August 2014.

- 11th Marketing Dynamics Conference, Las Vegas, August 2014.

- MSI Social Interactions Research Workshop, Boston, Mass., August 2013.

- Invited panel, Joint Statistical Meetings, Montréal, August 2013.

- INFORMS Marketing Science Conference, Istanbul, July 2013,

- Analytics Operations Engineering, Annual Meeting, Newport, R.I., May 2013.

- European Seminar on Bayesian Econometrics (ESOBE), WU-Vienna, November 2012.

- Invited session, INFORMS Annual Meeting, Phoenix, October 2012.

- Direct Marketing Educational Foundation Research Summit, Las Vegas, October 2012.

- Joint Statistical Meetings, San Diego, August 2012.

- International Society of Bayesian Analysis (ISBA) 2012 World Meeting, Kyoto, June 2012.

- INFORMS Marketing Science Conference, Boston, Mass., June 2012.

- CCCIS Industry Conference (data analytics and insurance), Jacksonville, Fla., May 2012.

- Direct Marketing Educational Foundation Professors' Institute, Dallas, Texas, 2012.

- Invited session, Parallel Computation for Bayesian Inference, Joint Statistical Meetings, Miami, 2011.

- Invited session, INFORMS Marketing Science Conference, Houston, June 2011.

- AMA Advanced Research Techniques Forum, Desert Springs, Calif., 2011.

- CEIBS Telecom Special Interest Forum, Shanghai, 2011

- Statistical Challenges in Electronic Commerce Research (SCECR), Austin, Texas, 2010

- Invited session, INFORMS Marketing Science Conference, Cologne, June 2010

- Invited session, INFORMS Marketing Science Conference, Ann Arbor, Michigan, June 2009

- Wharton Interactive Media Initiative conference on Modeling Social Network Data, Philadelphia, 2009.

- INFORMS Marketing Science Conference, Singapore, 2007.

- Invited seminars at Brigham Young University, University of California-Davis, Carnegie Mellon University, University of Chicago, Cornell University, Drexel University, Emory University, Erasmus University, Florida State University, Harvard University, University of Houston, Indiana University, INSEAD, University of Iowa, London Business School, University of Maryland, McGill University, University of Michigan, Monash University, University of North Carolina, Northwestern University, The Ohio State University, University of Pennsylvania, The Pennsylvania State University, University of Pittsburgh, University of Queensland, Singapore Management University, Southern Methodist University, Stanford University, Temple University, University of Texas at Arlington, University of Texas at Dallas, Tilburg University, University of Virginia, University of Washington, Washington University in St. Louis, University of Wisconsin-Milwaukee, and University of Waterloo

Awards, Honors and Grants

- SMU Cox Media Expert of the Year, 2018
- Leo Corrigan Research Professor, 2018-present
- Donna Wilhelm Fellowship, SMU DataArts, 2018-2019
- Finalist, ISMS Long-term Impact Award (for "Website Morphing"), 2017-2019
- Research grant, SMU University Research Council, 2017-18 ($6,000)
- Research grant, Charles Koch Foundation Program on Criminal Justice and Policing Reform, 2017-2018 ($18,880)
- Edwin L. Cox School of Business Research Excellence Award, 2016
- Fisher Faculty Fellowship, 2016-18
- SMU Emerging Leaders Seminar, 2016
- Fellow, Dedman College Interdisciplinary Institute, Southern Methodist University, 2015-16.
- Robert I. Mehr Award, for "a literature contribution which had a ten-year impact in the field of risk management and insurance." American Risk and Insurance Association, 2014
- *Management Science* Distinguished Service Award, 2013
- HP Labs Innovation Research Program, 2011-12 ($35,000)
- MIT Sloan Course Development Grant, 2010-12 ($10,000)
- Junior Faculty Research Assistance Program ($25,000), MIT Sloan School of Management, 2010
- Finalist, John D. C. Little Award (best marketing paper in an INFORMS journal), for "Website Morphing," 2010
- Best Student Paper, INFORMS Decision Analysis Society, 2006

- Russell Ackoff Award for Research in Human Decision Processes, Wharton School, University of Pennsylvania, 2005

- Outstanding Doctoral Student Summer Research Grant ($5,000), Wharton School, University of Pennsylvania, 2003

- Fuqua Scholar (top 10 percent at graduation), Fuqua School of Business, Duke University, 1996

Professional Service

- Journal editoral and peer review activities
  - *International Journal of Research in Marketing*.
    - Area editor, 2020-present.
    - Editorial review board, 2019-2020.
  - *Journal of Marketing Research*. Editorial review board, 2019-present.
  - *Marketing Science*. Editoral review board, 2011-2021.
  - Ad-hoc reviewer for *Annals of Applied Statistics, California Management Review, Cambridge University Press, Journal of the American Statistical Association, Journal of Computational and Graphical Statistics, Journal of Consumer Research, Journal of Health Economics, Journal of Retailing, Journal of Retailing and Consumer Services, Journal of Risk and Insurance, Journal of Interactive Marketing, Machine Learning, Management Science, Operations Research, Production and Operations Management, Psychological Science, Psychometrika, Quantitative Marketing and Economics, and Statistics and Computing.*

- Conference and competition review activities
  - 2024 Association for Consumer Research Conference. Ad-hoc reviewer for contributed abstracts.
  - Alden G. Clayton Dissertation Proposal Competition, Marketing Science Institute. Reviewer, 2017, 2022, 2023
  - 2020 INFORMS Marketing Science Conference. Ad-hoc reviewer for contributed abstracts.
  - 2016 AMA Winter Marketing Educators Conference. Ad-hoc reviewer for contributed abstracts.
  - Wharton Customer Analytics Initiative. Ad-hoc reviewer for research proposals. 2014, 2015.
  - Marketing Science Institute 2014 Research Proposal Competition on Social Interactions and Social Media Marketing. Evaluation Committee.

- Conference and track organizer
  - 2018 Marketing Dynamics Conference. Conference organizer and host (at SMU).
  - 2018 AMA Winter Academic Conference. Organizer. Early Career Mentorship Program.
  - 2015 AMA Winter Marketing Educators Conference. Track Chair, Marketing Analytics and Metrics.

- Program Chair for 2009, 2013 and 2015 Joint Statistical Meetings (elected). American Statistical Association, Section on Statistics and Marketing.
- 2011 Joint Statistical Meetings. Organizer. Invited Session on Parallel Computation for Bayesian Inference.
- 2010 Joint Statistical Meetings. Organizer. Invited Session on Probability Models of Customer Lifetime Value.

- Professional Organizations
  - Section Chair (elected), American Statistical Association, Section on Statistics and Marketing, 2011.
  - Continuing memberships: American Marketing Association, American Statistical Association, INFORMS, International Society for Bayesian Analysis

School and University Service

Southern Methodist University

- Faculty Senate
  - Senator, 2016-2019
  - Executive Committee, 2018-2019
  - Graduate Education Committee, 2023-present
  - Academic Policies Committee, 2016-2017, 2019-2020
  - Athletic Policies Committee, 2017-2021

- Data Science Institute Faculty Advisory Committee, 2020-2023

- University Athletics Council, 2017-2021

- University Admission Council, 2019-2020

- Provost Working Group on Colonial Group Faculty Survey, 2019-2020

- Committee on the Status of Non-Tenure-Line Faculty, 2017-2018

- SMU Cox School of Business
  - Interdepartmental Seminar Series on Business Research Methods, founding organizer, 2018-present
  - Information Technology Committee, 2018-present
  - Dean Search Committee, 2016-2017

- SMU Dedman College, Department of Statistical Science, Recruiting Committee, 2019-2020

Massachusetts Institute of Technology

- Faculty Search Committee, Operations Research and Statistics, 2009

Teaching and Advising

- SMU Cox School of Business

- Marketing Management (MBA and MS core)
- Customer Analytics using Probability Models (MS in Business Analytics core)
- Managerial Statistics (MBA and MS core)
- Global Leadership Program (MBA degree requirement)

- MIT Sloan School of Management
  - Customer Analytics using Probability Models (MBA elective)
  - Marketing Management (MBA core)
  - Marketing New Products (MBA elective)
  - Doctoral Seminar in Marketing (selected sessions)
- Saïd Business School, University of Oxford
  - Marketing Analytics Using Probability Models (MBA elective)
- Undergraduate thesis advisor, Eli Stein, Harvard University Department of Statistics, 2013
  - Received highest honors in department

Industry experience

- Evergage, Inc., Advisor, 2018-2019
- Boston Consulting Group, Fundamentals of Marketing, 2012
- CCC Information Services, Science Advisory Board, 2011-2015
- Micronotes, Inc., Technical Advisory Board, 2011-2014
- Chello Broadband, N.V., Amsterdam, Netherlands, V.P., Global Affiliate Operations, 1999-2002
- Marcus Cable/Charter Communications. Fort Worth, Texas. Director, New Media. 1997-1999
- Comcast Online, Philadelphia, Pa., Manager, National Operations and Logistics, 1996-1997
- ESPN, Bristol, Conn. Production Assistant, 1993-1994